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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,567	02/25/2002	Joe Pasqua	505102000600	8635
7590	02/11/2005		EXAMINER	
Tyler S. Brown Morrison & Foerster LLP 2000 Pennsylvania Ave., N.W. Washington, DC 20006-1888			MACKOWEY, ANTHONY M	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/080,567

Applicant(s)

PASQUA, JOE

Examiner

Anthony Mackowey

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,629,770 to Brassil et al. (Brassil '770).

As to claim 1, Brassil '770 discloses a method for detecting a watermark in a document (col. 5, lines 45-48, Brassil '770 teaches a decoder extracts (detects) a codeword (watermark) from a document.), comprising:

loading a page image of a watermarked document (col. 5, lines 49-52; col. 12, lines 28-29, Brassil '770 teaches the document being recovered in electronic or paper form, if in paper form the document is scanned producing an image of the page(s).),

locating a set of scan lines in the watermarked page image (col. 6, lines 26-35; col. 8, lines 9-32, Brassil '770 teaches the method by which text lines are identified and then scanned in the document.),

calculating a detection value (col. 8, lines 35-44, Brassil '770 teaches finding the centroid spacing between lines in the spaced document.),

loading a page image of an original document and locating a set of scan lines in the original page image (col. 12, lines 28-29, Brassil ' 770 teaches scanning in the original unmarked copy if its bitmap is not already available.),

calculating a target value (col. 35-46, Brassil ' 770 teaches finding the centroid spacing between lines in the unspaced document.), and

determining a difference between the target value and the detection value (col. 8, line 47, Brassil ' 770 subtracts the centroid spacing between lines of the unspaced document are subtracted from centroid spacing between lines of the spaced document.).

The following is in regard to the examiner's interpretation of "left margin shift" as applied to claims 2 -5. Embodiments of the invention disclosed by Brassil ' 770 teach line shifting vertically (col. 3, lines 51-60), that is, the spacing between lines is increased or decreased in order to encode the watermark. In common word processing programs such as Microsoft® Word the margin properties can be adjusted for each line, thus the margin size becomes a characteristic property of the line. Lines shifted according to the method taught by Brassil would include these characteristic margins for each line, thus the characteristic margins would be shifted vertically along with the lines. The characteristic left margin of each line would be shifted up or down with its corresponding line, resulting in a left margin shift.

As to claim 2, Brassil ' 770 further discloses the step of determining a difference includes determining the amount of left margin shift based on the differences between the target value and the detection value (col. 8, line 47, The result of the subtraction taught by Brassil ' 770 would indicate the amount of shift in the spaced document with respect to the unspaced document.).

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As to claim 3, Brassil ' 770 further discloses the step of determining the amount of left margin shift includes determining the direction of left margin shift based on the difference between the target value and the detection value (col. 8, lines 47-48, Brassil ' 770 teaches determining the direction of shift based on the centroid spacing between lines.).

As to claim 4, Brassil ' 770 discloses a method for watermarking a document (col. 2, lines 31-37), comprising:

determining a watermark value (col. 3, lines 25-32, Brassil ' 770 teaches identification codes correlating to specific subscribers encoded to create unique versions of the documents.),

determining a watermark key (col. 3, lines 25-32, Brassil ' 770 teaches the document is encoded according to a preselected set of alterations set up in a codebook.),

determining a watermark line based on the watermark key (col. 4, lines 23-24, Brassil '770 teaches finding a line to be moved after reading the codeword.), and

shifting a left margin of the watermark line based on the watermark value (col. 3, lines 27-28, 51-60, see discussion of left margin shift above).

As to claim 5, Brassil '770 discloses performing the sets of:

determining a watermark value (col. 3, lines 25-32, Brassil '770 teaches identification codes correlating to specific subscribers encoded to create unique versions of the documents.),

determining a watermark key (col. 3, lines 25-32, Brassil '770 teaches the document is encoded according to a preselected set of alterations set up in a codebook.),

determining a watermark line based on the watermark key (col. 4, lines 23-24, Brassil '770 teaches finding a line to be moved after reading the codeword.), and

shifting a left margin of the watermark line based on the watermark value (col. 3, lines 27-28, 51-60, see discussion of left margin shift above.).

With regard to a computer readable medium having stored thereon a plurality of sequences of instructions for watermarking a document, the plurality of sequences of instructions including sequences of instructions, which when executed by a processor, cause the processor to perform the steps. Brassil '770 teaches utilizing a computer system to publish copies of a document for distribution to subscribers and perform the identification code functions (col. 1, lines 48-54). A computer readable medium having stored thereon a plurality of sequences of instructions and a processor for executing the instructions are inherent to the computer system disclosed by Brassil '770.

Claims 4 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,086,706 to Brassil et al. (Brassil '706).

Brassil '706 discloses a method for watermarking a document (col. 2, lines 39-41), comprising:

determining a watermark value (col. 3, lines 50-58, Brassil '706 teaches identification codes correlating to specific subscribers encoded to create unique versions of the documents.),

determining a watermark key (col. 3, lines 50-58, Brassil '706 teaches the document is encoded according to a preselected set of alterations set up in a codebook.),

determining a watermark line based on the watermark key (col. 4, lines 49-50, Brassil '706 teaches finding a line to be moved after reading the codeword.), and

shifting a left margin of the watermark line based on the watermark value (col. 4, lines 6-11, Brassil '706 discloses the lines may be dithered (shifted) horizontally to encode the document.

As to claim 5, Brassil '706 discloses performing the sets of:

determining a watermark value (col. 3, lines 50-58, Brassil '706 teaches identification codes correlating to specific subscribers encoded to create unique versions of the documents.),

determining a watermark key (col. 3, lines 50-58, Brassil '706 teaches the document is encoded according to a preselected set of alterations set up in a codebook.),

determining a watermark line based on the watermark key (col. 4, lines 49-50, Brassil '706 teaches finding a line to be moved after reading the codeword.), and

shifting a left margin of the watermark line based on the watermark value (col. 4, lines 6-11, Brassil '706 discloses the lines may be dithered (shifted) horizontally to encode the document.).

With regard to a computer readable medium having stored thereon a plurality of sequences of instructions for watermarking a document, the plurality of sequences of instructions including sequences of instructions, which when executed by a processor, cause the processor to perform the steps. Brassil '706 teaches utilizing a computer system to publish copies of a document for distribution to subscribers and perform the identification code functions (col. 1, lines 45-51). A computer readable medium having stored thereon a plurality of sequences of instructions and a processor for executing the instructions are inherent to the computer system disclosed by Brassil '706.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The paper entitled "Performance Comparison of Two Text Marking Methods" by Low and Maxemchuk for discussing line and word shifting to watermark text documents.

The paper entitled "Document Identification for Copyright Protection Using Centroid Detection" by Low, Maxemchuk and Lapone is cited for discussing line shifting to watermark text documents.



***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Mackowey whose telephone number is (703) 306-4086. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AM  
2/7/2005

  
Jon Chang  
Primary Examiner